

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at lines 1-2 on page 7 with the following rewritten paragraph:

-- **Fig. 6 shows** ~~**Figs. 6(a), (b), and (c) show**~~ three different conventional localized modulations of the data, "testing 1, 2, 3..." --

Please replace the paragraph at line 8 on page 7 with the following rewritten paragraph:

-- **Fig. 9 shows the spatially encoded data of the bottom modulation of Fig. 6**
Fig. 6(e). --

Please replace the paragraph at line 24 on page 7 to line 12 on page 8, with the following rewritten paragraph:

-- Normally, barcodes are constructed so that a bit of information is localized to one or a few discrete locations within **A**; or, several bits are grouped into a glyph that spans a limited range within **A**, as discussed above. **Fig. 6** ~~Fig. 5~~ shows three "conventional" ways of invertibly encoding and placing the data "testing 1, 2, 3..." in an array. The top and middle methods use recognizable glyphs. The top method uses more pixels and levels of gray to represent the data than does the middle encoding method, while the method utilized in the bottom of **Fig. 6** represents each bit of a byte by a dark or light pixel against a gray background with each byte arranged in a 3 x 3 base. In the third method, a parity bit is also included for single-bit error detection. A wide variety of alternative encoding methods are available, e.g., the encoding just described, Aztec Code, Data Matrix, Data Strip Code, MaxiCode, PDF 417, Micro-PDF 417, QR Code and the like. Other encoding methods will be well known to those of skill in the art. Each encoding method offers different levels of convenience, data density, and error correction, but in all of the prior barcoding methods, the encoded data are recorded in a localized fashion as in **Fig. 6**. If part of the barcode is corrupted by noise, damage, or blockage, the data may not be recoverable. For example, **Fig. 7** shows the effect of Gaussian noise on the legibility of the data in **Fig. 6**. **Fig. 8** shows the effect of occlusion on the data in **Fig. 6**. --